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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/529,856	03/25/2005	Noriko Watanabe	70404.54/ok	5341
54072	7590 11/30/2006		EXAMINER	
SHARP KABUSHIKI KAISHA C/O KEATING & BENNETT, LLP 8180 GREENSBORO DRIVE			VERAA, CHRISTOPHER	
			ART UNIT	PAPER NUMBER
SUITE 850	•	•	3611	:
MCLEAN, VA 22102			DATE MAILED: 11/30/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/529,856	WATANABE, NORIKO				
Office Action Summary	Examiner	Art Unit				
	Christopher E. Veraa	3611				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 25 M	larch 2005.					
,	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	ar.					
10) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 25 March 2005 is/are:		o by the Examiner				
Applicant may not request that any objection to the		•				
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)☐ Some * c)☐ None of:						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
						3. Copies of the certified copies of the prio
application from the International Burea						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D. 5) Notice of Informal F					
Paper No(s)/Mail Date <u>1 page</u> .	6) Other:					

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#### **DETAILED ACTION**

### Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 3. Claims 1, 2, 4, 5, 7, 9, 10, and 12 are rejected under 35 U.S.C. 102 (a) end (e) as being anticipated by Truc (US-6502341).

As to claim 1, Truc teaches a display device with a frame for holding a display panel comprising a substrate, where the frame comprises a support portion comprising



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a flat portion (32) and a curved portion (20). When no external force is applied to the substrate a gap is left between the substrate and the curved portion.

As to claim 2, the supporting portion includes a second curved portion (20) that faces the first curved portion.

As to claim 4, Truc also teaches using a reinforcing plate (14).

As to claim 5, Truc attaches the reinforcing plate to the flat portion with an adhesive.

As to claim 7, the substrate is plastic.

As to claim 9, Truc uses a reinforcing plate.

As to claim 10, the reinforcing plate is attached to the flat portion with adhesive.

As to claim 12, the substrate is plastic.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 3, 6, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Truc in view of Gustafson (US-5032436).

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As to claims 3 and 8, Gustafson teaches using an adhesive to fix the display panel substrate to the supporting portion of the frame. It would be obvious to one of ordinary skill in the art to modify Truc by using adhesive to mount the substrate with adhesive in order to make the display device more permanent.

As to claims 6 and 11, the frame in Gustafson is elastic. It would be obvious to one of ordinary skill in the art at the time of the invention to make the supporting structure elastic so that the frame "can conform to the surface and edges of a [the substrate] so that the adhesive can firmly adhere thereto" (Gustafson, column 1, line 66 to column 2, line 4)

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takizawa et al (US-6942624) teaches a fluid pressure transducer with a substrate retained within a frame with a curved edge on the frame.

Close (US-4554753) teaches a copy holder with a supporting having flat and curved portions.

Sano (US-6243147) teaches an LCD apparatus capable of preventing a break from a crack.

Kang (US-2005/0117105) teaches a flat panel display device.

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Mase (US-6956635) teaches an LCD manufacturing method with flat and curved portions.

Seo et al (US-2006/0254704) teaches a fabricating method for flexible displays.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Veraa whose telephone number is 571-272-2329. The examiner can normally be reached on Monday through Friday, 7:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LESLEY D. MORRIS

SORY PATENT EXAMINER

TECHNOLOGY CENTER 3600